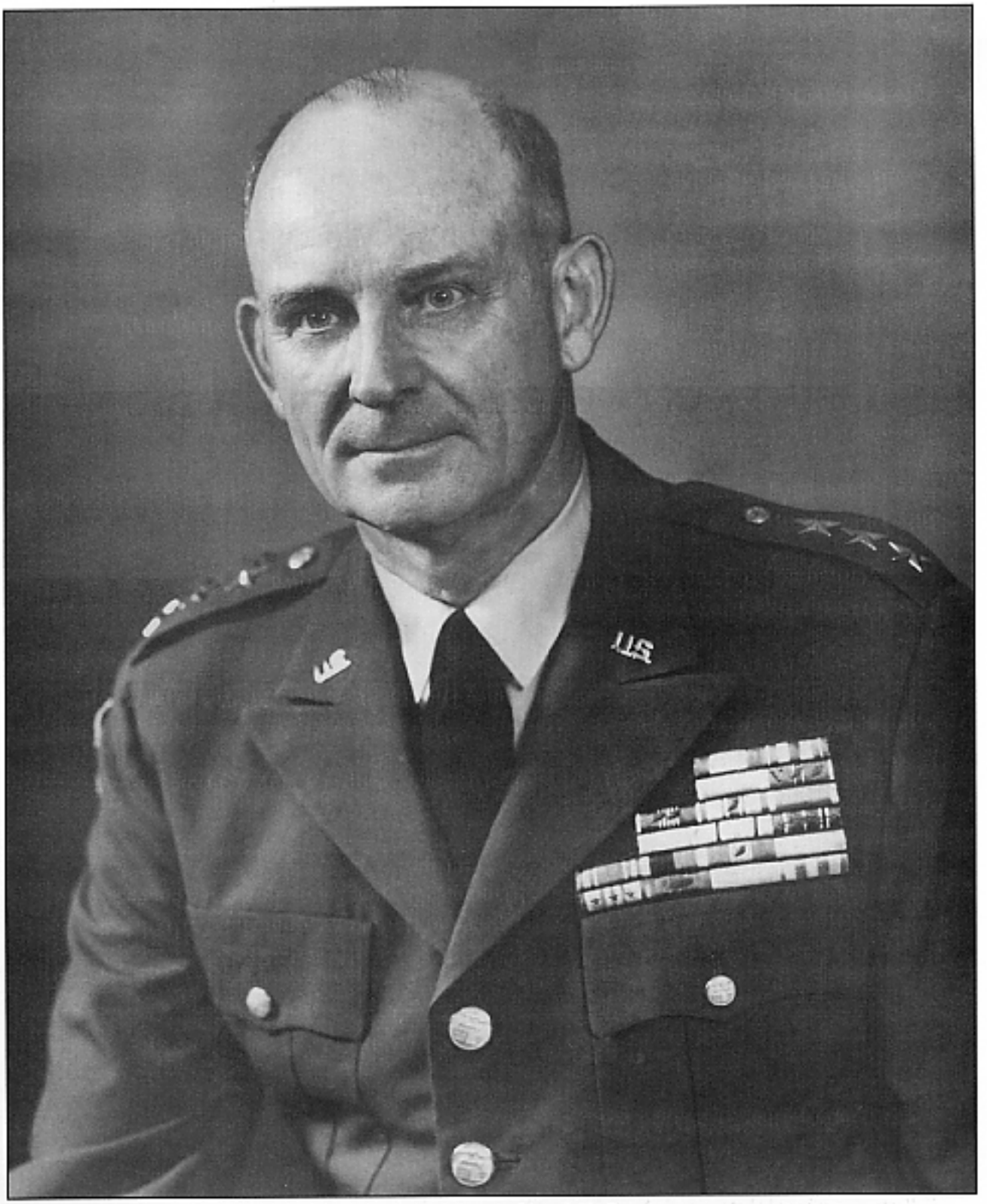
Engineer Memoirs

LIEUTENANT GENERAL CARROLL H. DUNN

U.S. Army



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The Early Years, 1916 to 1934

Q: I'm somewhat less familiar with your early years than with some of the other people's because you didn't go to West Point. But I do know that you were born in Lake Village, Arkansas, on 11 August 1916. I was wondering if you could tell me a little bit about Lake Village and your early precollege years there.

A: Lake Village is a small town, at that time (19 16) around 1,200 to 1,400 people; the county seat of Chicot County. It is located in the southeast corner of Arkansas. One side is bounded by the Mississippi River, which is the boundary between Arkansas and Mississippi. The other-the southern side-forms the joint boundary between Louisiana and Arkansas. It is an agricultural community primarily, with very fertile, alluvial soil subject to overflow from the Arkansas and Mississippi rivers in the early days. Its chief feature was a lake that at one time had been a bend in the Mississippi, which, probably around 1500 or thereabouts, had been naturally severed from the river. It became a natural lake. As I remember it, it was the largest so-called natural lake in Arkansas.

My father was basically a farmer, though he did other things through his life. I was the second of four boys (one died in infancy) born into the family. We lived in Lake Village for several years, and then about 1917 moved to south Mississippi, which had been the original home of both my parents when they were married. We lived there until early 1920, when we moved back to Arkansas. The remainder of my life prior to going to college was spent in that community. All of my attendance at grade and high school was in Lake Village, where I graduated from Lakeside High School in1934.

Q: You said that your father was in farming and other pursuits. Beyond that, was there any military service background in your mother's or father's family?

A: A younger brother of my dad served in World War I as a private and corporal in the infantry. And., as I understand, my great grandfathers on both my mother's and father's

[1]Dr. Paul K. Walker conducted this tape-recorded interview with Lieutenant General (Ret.) Carroll H. Dunn in Washington, DC., and New York City. The interview took place in April and July 198 1. Both General Dunn and Dr. Walker edited the transcript. The original tapes and unedited manuscript are in the Research Collections, Office of History, U.S. Army Corps of Engineers, Alexandria, Virginia.

side were in the Civil War. My mother was a Yankee born in Iowa. She moved to Mississippi when she was about four, in the late 1890s. Her father had been in a farm accident in Iowa and had lost his left arm. He found that the weather was too severe, and so moved the family south to Centreville, Mississippi, about 1896. Both she and my father were residents of that area of Mississippi.

Q: Lake Village was a pretty small town. What were some of the main interests that you had as you were growing up?

A: Well, in terms of life events that are significant: I started school in 1922, first grade, and in January of 1923 I was severely burned. As a result I was confined at home for several months because of third degree burns on my back and arms. I recovered and was told later, when I appeared for my first physical as I was coming into the Army, that I would not be accepted because anyone with scars that heavy was bound to have physical impairments. Fortunately, I was able to convince them that I didn't, and it was not a major problem. I still, of course, carry the scars of that burn. Because of this I really had to learn to walk again after more than two months in bed. Nowadays I'm sure they wouldn't keep someone in bed that long, but in those days they thought idleness was the desirable thing.

Then in 1927, I remember very vividly the flood on the Arkansas and the Mississippi, the lower Mississippi River. I was in the fifth grade, and we had gone to school. The river was very high. There was much concern, and around 9:00 or 9:30 in the morning, word came through the school that the children should be dismissed. The levee had broken on the lower Arkansas River near its juncture with the Mississippi, and they anticipated flooding. We went home. I lived about three miles from the school, and I remember that evening watching the water rise in the back of our place. The next morning the lake and the flood water were one and we were totally flooded. My mother was just recovering from an operation, and she and we three boys went by skiff and small outboard motorboat for about six miles until we reached high ground. We went the next five miles or so on a railroad handcar, and then caught a train to go to my grandfather's in Mississippi, the original home. We crossed the Mississippi River at Vicksburg on the last train that ran before the water got so high that it was impossible for trains to run. They crossed on a ferry at the time. My early life was heavily influenced by what was one of the major civil works activities of the Corps. It was the Jadwin Plan, which was developed in 1928 for control of floods on the lower Mississippi River. Whether or not that really had anything to do with-certainly it didn't at that time, but later may have had some influence-my coming into the Army-I'm not sure. Maybe a little later we can get into that aspect of my career.

I did participate in extracurricular activities in high school. I played football, I weighed all of 155 pounds, which was not significant for a football player, and beyond high

school I did not engage in any such sport. But that and track were extracurricular activities in high school.

As I said, Lake Village is primarily a farming community. I grew up working on a farm. I mowed yards and delivered magazines to earn money. Dad, being both a farmer and entrepreneur of one kind or another, was always looking for things that might bring in some additional income. One of the things he did in the early 1930s, as the plan on the lower Mississippi to raise the levees along the river developed, was to work with a contractor planting Bermuda grass sod on the levees as protection against erosion. One of the jobs that I had during the summer as a sophomore and junior in high school was taking a crew and planting sod on the levee in the area near Lake Village, and also in Louisiana across from Vicksburg. So, again, there was a connection with Corps of Engineers' activities at a relatively early age.

Q: And you were aware of the Corps' presence at that time?

A: Oh, yes. The Corps was very much an activity in that alluvial valley of the river, and was one of the employers of people that had a very well-regarded name.

Q: How did the locals view the Corps?

A: It was a very desirable organization for which to work.

I also became aware of the Waterways Experiment Station at Vicksburg, since I worked in the Vicksburg area in 1933 after my junior year in high school. I had visited the lab not too long after it had been formed in 1929 by General [Herbert D.] Vogel. I was aware of some of the hydraulic model studies from this early time. And, again, while at the time I don't think I was aware that the Corps was weaving a web around me, there were these connections at an early age. They certainly gave me some knowledge of Corps' activities when the time came to consider whether or not I might join it.

Q: Beyond the positive local attitude toward the Corps as an employer' what about attitudes toward the flood control activity itself?

A: Very, very, very supportive in general. There was one aspect of the Jadwin Plan that involved a floodway to protect the Mississippi side that went down through Chicot County, which was something that those on the Arkansas side were violently opposed to, and it never did come about. I read over some of the congressional hearings in later years. Though I was vaguely aware of them at the time, I really didn't know all of the details about the hearings and other testimony. When I discovered later some of the things that had gone on, and that the floodway was part of the plan, I knew why they

were so violently opposed. In general, however, the Corps was well received in the area, very well thought of, and is still so today.

Q: In 1933 when you were working in Vicksburg, how did the Depression affect your family?

A: Very severely. Dad, in addition to trying to do farming, also tried to do other activities. He managed some farming interests for others. He at one time was manager of a cotton gin. At other times, as I indicated, he did sodding work on the levee job, and so forth as a matter of making ends meet. I can remember the times very well. And while we never suffered physically, there was always the question of whether there was going to be money enough to get by. We always had a garden, raised vegetables. We always had a few milk cows so that we could have our own milk and butter. We had chickens for eggs. In large measure, we were self-sufficient for food.

University of Illinois, 19344938

Q: You went to the University of Illinois, where you started in September 1934. Before entering there, how did you become interested-

A: Why did I go to the University of Illinois?

Q: Well, first of all, you were the second child. Had your older brother gone to college?

A: Yes. First, maybe I better go back. I mentioned four children. My youngest brother died from the results of an automobile accident when he was only five months old. He was in the car with my father, lying on the front seat of the car. They didn't have baby seats in those days. A truck came out of a side street in front of Dad, and he was not successful in an attempt to avoid it. The car was hit, turned over, and the baby was fatally injured. So that, in reality, there were only three boys remaining. This was in 1924. I was about eight at the time.

Going back to the question of college, as I grew up, while our family was not in a position to do much about college education, Mother and Dad always had in mind that we three boys should get a college education. More than anything else, I think, they instilled in us the idea that this was the thing that we should do and that everyone should work toward that end. They had attempted to save money to help, but the little money put aside was lost in the Depression by a bank closing. And so, while they had given us a very strong desire and anticipation that we would go to college, the means were somewhat limited.

There were several reasons for my going to the University of Illinois. One, I had always had a mechanical aptitude. I had done the usual working on cars, things of that sort, worked around farm machinery. And I had had some encouragement. Dad had always felt somehow, and I don't know why, that mechanical engineering was a good thing for me to do. My grandfather (my mother's father) was very ingenious and on their farm in Mississippi had developed a number of things. He had dammed up a creek and put in a small hydroelectric plant so that they could have electricity back in the early twenties. He had taken the engine block of an old Ford car engine and built it into a pump. He dammed another creek and put in a waterwheel and, using this block as a pump, had running water at their dairy barn and at the house. He had also developed a sawmill. So I think primarily from him I inherited an inclination toward engineering and mechanics.

Q: You saw these things when you—

A: I spent nearly every summer for about four years from about 8 to 12 with my maternal grandfather and my uncle, who worked with him. I'm sure that at least indirectly this influenced my movement toward engineering and probably toward mechanical engineering, although there was no formal background that would lead me to do this. But I decided early that I wanted to take engineering.

That being the case, my feeling was that employment and opportunities were probably better in the North than in the South. Realizing this, just as the Depression was on in the early thirties, made going North to school somewhat attractive.

Second, in actual fact, it was about 520 miles from Lake Village to Champaign, Illinois. It was about 400 miles from Lake Village to Fayetteville, the location of the University of Arkansas. The difference was the railroad. The I.C. Railroad ran up the east side of the Mississippi River, and it was easier in those days to get to Champaign than it was to go over 400 miles of gravel road to go to the University of Arkansas. That was a second, though secondary, consideration.

The real consideration was the fact that my mother's elder sister lived in Champaign, Illinois, and she was there primarily to assist her children in getting an education. When my older brother two years before, in 1932, decided to go to college, our aunt took him in and assisted in getting him started. When I came along, he was able to line up a place for us to live in the home of one of the chemistry professors (chemistry being his specialty) where we had a basement apartment. In return, I put in about 14 hours a week working at their house and yard, taking care of their car, and so forth. This gave us a working opportunity. And my brother had a job in the chemistry library where, as I remember, he made something like $20 to $25 a month. This was what we used to buy food. So we "batched." This developed the capability for us to have a place to stay

and food. The only other things needed were books and tuition money. These basically were the reasons why I went to the University of Illinois. This arrangement lasted for two years until my brother graduated. It worked out very well.

As a matter of interest, the total amount of financial help my parents were able to give me was somewhere between $200 and $300 in the four years, most of which was in the first year.

Q: Do you remember what the tuition was back then?

A: Tuition was $250 a year for out-of-state students.

Q: So you had to do something else to get that money?

A: Well, throughout my four years, I worked during the summers. After my older brother graduated, I moved to a rooming house. I waited tables in a sorority for my meals. During my senior year, I had a job under the New Deal program called the National Youth Administration [NYA], and I worked in the materials lab at the university for one of the professors. The actual work was in stress corrosion of steels. This was also a part of the work I did for an undergraduate thesis. Then I borrowed some money from the university program. So summer work, work during school, and minimum borrowing with a small amount of help from my parents provided the opportunity for a college education.

Q: And so your major emphasis from the beginning was on mechanical engineering?

A: Engineering with mechanical as the basic program.

The Choice of a Military Career, 1938

Q: Now, it's interesting to me that very shortly after you graduated from the University of Illinois you began a military career as a result of a professional examination. I was wondering then how this came about.

A: I was in the ROTC program at the University of Illinois for four years.

Q: You had a Corps of Engineers unit in the ROTC?

A: In the ROTC at the University of Illinois, there were infantry, field artillery, coast artillery, engineers, signal, and cavalry.

Q: And because of your major field, that sort of—

A: That tended to put me in the engineers. My going into the Army revolved around the fact that in 1936, after the flood on the Ohio River of that year, Congress in its civil works legislation passed a bill to enlarge the officer corps of the Corps of Engineers--as I remember it-by 108 officers. My memory is that the number of officers already in the Corps in midyear 1936 was on the order of 600 to 700. In passing this legislation, my understanding is that Congress felt not only that there was a need for additional Corps officers, but it was also desirable that some of them have an engineering background in civil life. So they set up this program for the enlargement and specified that 72 of the 108 would be engineers who had engineer degrees in civil life. The remaining 36 would come from increased quotas for West Point graduates.

It was established that 72 would be taken in increments. The first increment, I believe, of 18, was commissioned in February 1937, the second increment in September 1937, and the third increment of 36 was taken in 1 July 193 8. During my senior year (in late 1937 or early 1938), the senior engineer officer with the ROTC at Illinois announced that this opportunity was available and strongly encouraged me to apply. The encouragement was so strong that, more to get him off my back than anything else, I did submit an application as did one other officer at Illinois. As I remember, in January or February of 1938 the application went in. This involved both a physical exam and a professional exam. The professional exam was in two parts, one verbal before a board of officers and the other a written examination. There was also a provision that, if I met certain criteria, I could accept a fixed grade on the written portion of the exam and be exempt from the actual examination.

The question was whether there would be enough people taking the exam and making a higher grade score so that there wouldn't be any vacancies left if I took the exemption. That was the risk that I took. My understanding is that there were about 1,800 nationwide who took the examination for the 36 vacancies. The criteria for exemption, as I remember, was to be in the upper 10 percent of one's class, to be recommended by both the Dean of Engineering and the senior engineer ROTC officer, and possibly grades or activities. Anyway, I chose the exemption route. Frankly, part of the reason was that I still wasn't certain that I really wanted a commission in the Army, but I was going ahead because of the strong urging of the Professor of Military Science and. Tactics.

At the same time I had been fortunate in job interviews. Jobs were still scarce in1938. I had interviews with Caterpillar Tractor Company, General Electric, and International Harvester. I remember at least those three; there were possibly others. Actually, I had accepted a job with the Caterpillar Tractor Company to go to work on the 5th of July 1938 in an outstanding program. I would be an engineer trainee at the magnificent

starting salary of $125 a month under a two-year program. The $125 a month was for the first six months, then $145 for the second six months, and about $175, as I remember, for the second year. This was one of the most attractive programs offered to seniors at the University of Illinois at that time.

Q: They were based in Illinois, weren't they?

A: They were based in Peoria. As a comparative thing, the offer which I got from GE in the same type of training program was $60 a month to work in Schenectady, New York. While I had applied for an appointment in the Army Corps of Engineers through this program, I was also actively pursuing civilian employment. I felt that what I really wanted to do was industrial production. I was very attracted to the Caterpillar program and, as I say, had accepted their offer without knowing what would result from the application to the Corps.

I also had been scheduled to receive a Reserve commission as a second lieutenant through the ROTC program. I had planned to go to summer camp as soon as graduation was over in late June, and to do my two-week tour and therefore be exempt from additional camp requirements for five years. This was the program at that time for those in the Reserves. I planned to get this out of the way and then go to work for Caterpillar early in July. That was my plan.

I graduated in early June and went to Camp Custer, Michigan, shortly thereafter (about mid-June). While I was at Custer, in late June, I got a telegram from the War Department that said I was offered a commission in the Corps of Engineers Regular Army effective 1 July. So my problem then was to decide whether to go into the Army or go to work for the Caterpillar Tractor Company. It was a major decision. I had met my wife-to-be at the university. The fact is we had started going together in the spring of my freshman year.

Q: You are referring to Letha Jontz?

A: Letha Jontz from Moline, Illinois. She had graduated ahead of me and was then working for International Harvester Company in Indianapolis, Indiana. As a part of my attempt to make up my mind, I got on the train and went to Indianapolis to meet with her. Airplanes not being available in those days, it took some time. But we had a meeting of several hours to discuss the alternatives. I remembered my experience as I had seen the Corps operate in the lower Mississippi Valley area. I also talked very seriously with the Professor of Military Science and Tactics from the University of Illinois, who was also at camp.

Q: Do you remember who he was?

A: His name was [Charles J.]Taylor. Also, I talked with the junior officer among the regular engineer officers who were at Custer with whom I had a little better rapport, a graduate in the class of 1930 named [Robert B.] Lothrop. Incidentally, he was a prisoner and died during World War II, having been captured in the Philippines. But, also, in late 1938 it was clear that war clouds were forming, and I began to believe that there was a fairly high probability that we could be engaged in war activities. If so, as a Reserve officer, I would probably be affected. From the point of personal involvement, if that were the case, I would be better off being in early as a Regular officer. That, together with what I knew of the Corps' activities from my experience in relation to it, led me to believe that, while I might not under normal circumstances choose a military career, the opportunities in the Corps together with then present conditions did. influence my decision. After talking it over thoroughly with my wife-to-be, we decided that I would accept.

Of interest, as I compare it with personnel practices today, was the fact that they not only wouldn't tell you where you were going on your first assignment until after you had made a commitment, but you also had to agree to pay your own way to get to the first assignment. They didn't offer as many incentives as they do today, but still there was a great deal of competition for the vacancies, so they were able to call the shots.

I sent a response accepting a commission, wrote the Caterpillar Tractor Company that I wouldn't be arriving for employment on the 5th of July, and then came my first problem with the Army. This was completed about the 27th of June. The camp was just about over, and I was supposed to go back to Champaign, pack up my things, and get ready-1 thought originally to go to Caterpillar, but now to go into the Army (I knew not where). Unfortunately, the adjutant of the camp, an infantry major, was about as bureaucratic as you could get. Somehow he decided that, even though the original telegram said that I would have 13 days to report to my first station, I couldn't leave Camp Custer until I knew where I was to go. He wouldn't allow me to go back and pack up my things. He kept me at Camp Custer until the 9th of July when I finally found out I was going to be assigned to Fort McIntosh, Laredo, Texas, about 1,500 miles from Camp Custer. Now I had to get there at my own expense, having wasted nine days while I sat cooling my heels waiting on the Army to tell me where I was going, and waiting on a major to make a more enlightened decision!

Anyway, the orders came, and not knowing how I was going to get to Texas and realizing that I had to go by Champaign, Illinois, I made a deal with a Corps of Engineers captain who was one of the instructors at the camp, Charles H. McNutt (whom I later ran into a number of times). For $60 I bought a 1930 Buick that he had at the camp. I set out for Champaign to pack my things, then to Indianapolis to say goodbye to my wife-to-be, to Arkansas to see my folks, and headed for Texas to be there in four days. I made it. The car performed reasonably well, and I rolled into Fort

McIntosh on the 13th of July, the temperature approaching 100 degrees, with no air conditioning, to a place that appeared to me to be the end of the earth-south Texas along the Mexican border! That was the beginning of my career in the Corps of Engineers.

Q: You got yourselfto Laredo, Texas, but there are just a couple of things I was going to ask you before we went on. When you made this decision to go into the Corps of Engineers by professional examination, having been offered and turned down a job, did you have any idea about how long you might be in the military at that time? As it turned out, it was your life-long career.

A: Having decided to go into the Corps and to accept the appointment as offered, there was never any intent in my mind for other than a full career. I can remember that shortly after being in the Corps I saw published an annual list of officers of the Corps and their assignments. And I believe that my order of rank on that list was somewhere in the order of 710 or 720. Having been number 15 in 36 of those who came in on July1 st, I had a few people junior to me, but very few. At the time, they also used to publish your anticipated retirement date based upon retirement at age 64. I remember very vividly my retirement date was forecast to be August 1980, which seemed to me to be in the very distant future. No, there was never any intent on my part to have other than a lifetime career, and I anticipated that I would serve until my retirement date.

Q: Did your wife-to-be have misgivings? Was she from a military family or was this going to be a new thing for her to be the wife of an officer?

A: She had no relationship or experience with the military whatsoever. Her father was an engineer with the International Harvester Company. At the time we were married, he was chief inspector of the Indianapolis works, where they made truck engines. She had no background in the military, but took the position that, if that's what I wanted to do, she was willing to go along. I might add that when it did come time to retire she was more reluctant to leave than

Carroll and Letha Dunn, 11 November 1939.

I. She had enjoyed very much the relationships in the military: the people we knew, the friends we had. She found it to be a very satisfying experience, although certainly trying at times, including separation during World War II, during the Vietnam conflict, and at other times when I was overseas. But she became a very strong military wife.

Q: Did you have any feelings when you entered that you were at a disadvantage since you weren't a West Pointer? You mentioned that a larger number came in at that time, as you did, from civilian colleges. But was there a feeling of distinction, of being set apart from the officers who came the West Point route at this stage?

A: That was one of the things that had bothered me as I was trying to decide what to do. I talked about it at considerable length with Lieutenant Lothrop. He convinced me that this was not a matter that I had to be particularly concerned about. So other than to consider it, it never was an issue.

As you indicated, there were a fair number who came this route. There were also others who received a commission through what was called the Thomason Act, in the late 1930s. Then shortly after, as we began to mobilize for World War II, of course many, many more officers came on active duty. I can say in all honesty, I had no feelings whatsoever in my 35-plus years of service that the fact that I was not a West Pointer was in any way a detriment, or could I point to anything that was adversely affected by that fact. Some of my best friends are contemporaries who were from West Point, but many other friends are not West Pointers. It was not a problem in any way, shape, or form.

8th Engineer Squadron, 1st Cavalry Division, Fort McIntosh, Laredo, Texas, 1938-1941

Q: Were those of you who came in through this route ever together at any time? You said you didn't know where you were going and you described going directly to Texas, so I guess at that point at least you weren't together with the other officers.

A: We were not together at all, and they were sent, in effect, all over the world. There were some places where more than one was present. It happened that Roy Dodge and I ended up at Fort McIntosh, a post with a very small unit called a squadron, in effect a three-company battalion. It was called a squadron because it was a part of the 1st Cavalry Division, the 8th Engineer Squadron. Roy and I were both assigned there, and Ernie [Ernest C.] Adams-who had come in the September 1937 group-was also. In reality, there were three of us at that one station out of a total of, as I remember, 17 or 18 engineer officers.

Q: You were there until 1941, I believe.

A: I was there from July 1938 until February 194 1 except for a period of about five months when the unit was either in the field on maneuvers in west Texas or temporarily stationed at Fort Bliss, Texas, in the fall and winter of 1939 and early 1940. Then we moved back to Fort McIntosh.

Q: And what kinds of things was the squadron doing at Laredo?

A: They were engaged in the normal training activities of a unit. I remember doing bridge training on the Rio Grande River using a bridge that was invented for use in the Civil War, and that is absolutely factual. The floats or pontons were frames with canvas covers, to be portable. If we happened to get the bridge too far out from the bank, we were quite likely to hear shots from the Mexican side. One of our training activities was to be prepared to react to any Mexican raid along the border.

We probably were one of the more fortunate engineer units as far as training in the field. Money in those days was very scarce. The 1st Cavalry Division was spread along the border from Fort Bliss at El Paso to Brownsville on the Gulf, and we would have field training with the various elements of the division. One activity in the spring of 1939 was to go to west Texas with a platoon to make a reconnaissance map, which was used during division maneuvers in the fall of that year. One of the main requirements in that open country was to plot fences and gates because the cavalry division was mounted on horses. The restrictions on the use of land under easements was that we couldn't cut fences, so our maps had to show all the gates. The cavalry then knew where to head for, to get around and go through the fences. Windmills were a major landmark, and they had to be plotted on the map. I also went with a platoon for some antitank training at Fort Sam Houston, San Antonio, with the 2d Infantry Division. The 2d Engineers (their organic engineers) were at Fort Logan, Colorado, and that was too far to bring people for training at Fort Sam. We were only 150 or so miles away, so we got into training with the 2d Infantry Division as well as with the cavalry division. So even in those days in the late 1930s our unit spent a great deal of time training in the field.

Q: Normally that would have been a combat engineer regiment that would be with the infantry, as opposed to the squadron with the cavalry, right?

A: Yes. One of the things we did in the summer, being a motorized unit in a horse division, as a part of our training, was to go on a motorized hike, as we called it. This covered about 1,000 miles all in the state of Texas in the period of two weeks. We trained in motor movement and camping, etcetera, all over south Texas. I think it was very good training and was also somewhat of a vacation for the troops. We also made motor movements to west Texas as a part of our activities. So, as a unit, we probably got as much, or more, field training in those days as did any unit of the Regular Army.

Those were activities that kept us busy. We also tried to do some experiments ourselves. I remember trying to devise an antitank mine. I used a wooden box with TNT explosive and for a detonator, a blasting cap. I devised a means by which, if something ran over it, the cap would be sheared and explode. We also did other experiments with explosives to devise ways to make antitank obstacles by blowing craters. We had a very active organization, relatively small in number of people, but very active in training.

We also had the annual rifle fire training. When we were in the field with the cavalry, one of our major activities was to find locations for watering points and to operate them to water the horses. In west Texas, that's not an easy task.

We went on maneuvers in 1940 in east Texas and western Louisiana in what later became the area of Fort Polk, Louisiana. We were there before there were any military installations. Those came later as mobilization took place for World War II.

Q: There was a debate going on about the role of engineers with the mechanized cavalry. I don't know how much you recall about that, but from this we have the formation of the armored division. So you stayed with the cavalry right on until you went to Fort Leonard Wood?

A: Actually, I went to Fort Belvoir first, and then to Fort Leonard Wood.

My first experience with the mechanized cavalry came about in the Louisiana maneuvers in 1940. The 8th Engineers were there as part of the 1st Cavalry Division. It was the first attempt at mobilization of a large part of the Active Army. A part of our job had been to prepare the area for maneuvers, including reconnaissance and minimal base camp. One event that stands out in my memory involves the first mechanized unit. I was a young second lieutenant. There was a bridge across a stream in western Louisiana that had been severely damaged in a flood. One of the piers had been displaced; and in repairing it, instead of fixing it for full load, the state highway department had come in and built it up using some short lengths of wooden piling on top of a tilted pier. We had looked at it and decided that it was severely restricted in capacity and had set a load limit of ten tons for any vehicle crossing it. The squadron commander, or my company commander (I don't remember which), had left me there with a few men purely as a precautionary safety measure, not as a part of the exercise. My orders were to prevent any U.S. military from using it for a vehicle that exceeded ten tons.

While we were there, a unit came up that happened to be the 1st Mechanized Brigade under Brigadier General [Adna R.] Chaffee, Jr. I stopped them and wouldn't let them cross because they had some vehicles that exceeded ten tons. General Chaffee was very

upset that this young lieutenant would refuse to let him cross. One of the thingshe said to me was, "Have you talked to Captain Clarke about this?" He referred to General Bruce Clarke, who was the company commander of the engineer company with the mechanized brigade. I told him I hadn't seen Captain Clarke but that I was fairly certain that there was a very high likelihood of a disaster if heavier loaded vehicles used this bridge. We could not afford to risk the safety of the military or damage to the state bridge, and therefore I couldn't allow him to cross. And he didn't cross. That was the first experience I had with the mechanized cavalry.

Q: When I interviewed General Clarke, he referred to these exercises and saw them leading to the establishment of the armored division. They demonstrated the advantages of mobility and engineer support?

A: There's no question. Of course, I wasn't in a position really to have any influence on that. I would say that my own experience showed me the real problems that were involved in the use of horse cavalry in any type of warfare that we were likely to be engaged in in Europe. The movement into armor was a move in the right direction to accomplish the things that in olden days had been the responsibility of the cavalry in wide sweeps or deep penetrations. The time of the horse was coming to an end.

Q: And you saw this at the time?

A: Yes.

Q: And so you probably didn't feel you'd be involved with the cavalry for that long?

A: This was my first assignment. It wasn't a forever assignment. It had to change.

Q: I think, too, in 1940, Paul Thompson, I don't know if you recall this name, was a captain who was brought back to OCE [Office of the Chief of Engineers] and was writing on the role of engineers in combat and the German blitzkrieg. And, as it's been said, his writings, many of which were published in some of the engineer journals, were influential in this movement. And beyond that, I mentioned before the debate on the general role of engineers in combat that was going on at this time.

A: I was not a part of that. When I was transferred from Fort McIntosh, it was to become a part of what was to be the engineer training center at Fort Leonard Wood, Missouri. We were gathered together at Fort Belvoir along with the cadre who was to make up the other training center at Fort Belvoir. After arriving at Belvoir, through the acquaintance of another officer who' was assigned to the 'Office of the Chief of Engineers, I first met Paul Thompson. This would have been in February of 194 1. I don't remember any detailed discussions on the question of the role of the engineers in

Germany and in the German blitzkrieg specifically, but, of course, was aware of the preparation for possible war and the mobilization. As I recall, he [Thompson] had recently returned from Germany, where he had taken some advanced engineering studies and had also become fairly well acquainted with German activities. He was in the intelligence group in the Office of the Chief of Engineers, as I remember it, at the time.

Army Training Center, Fort Leonard Wood, Missouri, 1941-1942

Q: So you went to Belvoir. That was your first time there as part of getting ready to go on to Leonard Wood. Belvoir training center opened somewhat earlier, in February 1941, I believe. Then it was in May of that year that Fort Leonard Wood training center opened.

A: **Yes, we** went to Belvoir to get together as a headquarters because construction was not completed at Leonard Wood. It happened that, of the Regular Army officers chosen to make up the cadre for the training center, I was the only lieutenant in the group. We had not yet had a general officer designated to be the commander. The deputy commander, who was the active head of the organizational group putting together the training center, was Daniel Noce. He decided that my duties were to be as an aide for the commanding general when he was finally named. In the interim, I served as assistant adjutant in putting together the organization of the training center, and we moved to Leonard Wood in late April or early May, as I remember. And about that time, Brigadier General Ulysses S. Grant III, grandson of the original, was designated as the commanding general. I became his aide, but still continued as assistant adjutant.

We found my activities, in addition to being an aide, very interesting. General Grant lived at Leonard Wood. My wife and I, married less than two years, lived in Rolla, Missouri, the nearest town in which we could find a place. As General Grant traveled around Missouri, where his grandfather was well known, people were always glad to have him speak and attend events. Both my wife and I usually accompanied him. He took a very great interest in both of us, and we became quite familiar with Missouri at that time and with activities of his grandfather as they were remembered by people of Missouri of that day.

In addition, I had the job of being the "staffjudge advocate" of the center. We had none assigned, and it became my duty to review various special court and other court cases (we did not have general court martial jurisdiction) and to make recommendations for the general's action. In setting this up, I remember I looked through the replacement trainees who were coming through and found a couple of lawyers from civilian life who

were draftees. I brought them into the office to be the actual legal reviewers for me. That was just one of my special functions in my job as assistant adjutant.

I was also involved in issuing daily orders and things of that sort, as well as the more routine administrative activities. General Grant was very strong on being in the field, seeing what was going on in training. This he did in addition to traveling around the state of Missouri and neighboring states as a part of community activities.

Q: Did you continue that relationship with him?

A: Yes, we continued contact even after his retirement, until he died here in Washington a number of years later. After he left the training center (in fact, I left the training center before he did for my next assignment), he came to Washington and was active as head of civil defense in the Washington area.

Q: At Fort Leonard Wood officers were coming from a variety of sources because of the mobilization and the shortages of getting them from traditional sources like ROTC. Where were they coming from?

A: Mostly from some type of Reserve or National Guard appointment. The officer candidate training had not started at the time. It came along a little later.

Q: Do you recall any specific problems?

A: There was a relatively small cadre of Regular officers in addition to the commanding general and deputy commander. There was a training group of more senior Regular officers in charge of developing each particular phase of training. The senior commanders down to battalion commanders were all experienced Regular officers. The officers coming in, primarily from call-up of Reserves and National Guard, became the company commanders, the platoon leaders, the battalion staffs and, gradually, as they trained on the job, began to take over more and more of the senior positions. My memory is that the system worked fairly well.

They were organized into two groups, and each group had a number of battalions. In those days there was separation of the races; one group was black and one was white. The white group, being the larger group, had more battalions than did the black group, but the training and the activities were the same. As to the source of officer commission-at least in my experience—I have no strong memory of any major problem as people came in and were absorbed into the activity. There was a fairly heavy turnover, and before a year was over a larger number of the Regular officers had been sent out to other assignments and activities. Many who came in as captains had gone out as majors to command new battalions that were being formed around the country.

Lt. Col. Carroll Dunn inspects a foot bridge during training at Camp Blanding, Florida, 1943.

303d Engineer Combat Battalion, Camp Butner, North Carolina, 1942

As far as I can remember, of the younger officers-that is, those with less than ten years' service who came to Leonard Wood in early 1941-1 was the last to go. I went to Fort Leavenworth, Kansas, to a special 13-week course in early 1942. It was called the Seventh General Staff Class. Shortly after I graduated from Leavenworth and returned to the training center as the adjutant, I was ordered to Fort Belvoir for a month's divisional staff training course for engineer officers. I then went to Camp Butner, North Carolina, near Durham as the battalion exec of a new unit being formed, the 303d Engineer Combat Battalion of the 78th Infantry Division. The battalion commander was a son of an ex-Chief of Engineers, Edward M. Markham, Jr.

105th Engineer Combat Battalion, Camp Blanding, Florida, 1942

We arrived at Camp Butner in early July 1942. There was a delay in sending in fillers, but we spent the time training the cadre of the battalion. After I'd been there about five months, I was ordered to Camp Blanding, Florida, in November of 1942. One of the assistant division commanders of the 78th Infantry Division, Brigadier General (later Lieutenant General) William K. Harrison, had been transferred to the 30th Infantry Division at Camp Blanding. He had known me in the 78th as the exec of the engineer battalion. When the division commander of the 30th Infantry Division wanted to find another battalion commander for the engineer battalion of the 30th, apparently General Harrison remembered me and recommended that I be transferred. That, apparently, as near as I can find out, was the reason why I was picked out and ordered to Camp Blanding to be the new battalion commander of the 105th Engineer Battalion of this National Guard division drawn from the Carolinas and Tennessee. It had been called to active duty and then cadred a number of times; that is, people moved out from that

The undefeated 105th Engineer Battalion baseball team, Camp Handing, Florida, won the 30th Division championship, 9 May 1943. Lt. Col. Carroll Dunn stands upper left.

division to form other new units. When I joined the battalion in November 1942, there were just over 100 people in the battalion, with many vacancies in all grades because of those assigned to other cadres. The division had now been designated to be filled up, relieved of any further cadre requirements, and placed on a very heavy program of training.

It was at this time that a change in battalion commanders was made, and I came in as a major to command the battalion. From just over 100 people when I arrived, in less than a month we had 1,000 in the battalion. We started training the battalion from individual through squad, platoon, company, and battalion training beginning 1 December 1942 and ending with maneuvers in Tennessee in November 1943. This provided about one year of very intensive training before movement of the division overseas. The decision that this unit would be trained as a division was very helpful in providing protection from calls to move people out to other units. The movement overseas finally took place in February 1944, when the unit went to England to be a part of the forces to go into Europe in June of 1944.

Q: I want to backtrack a little bit to Fort Leonard Wood because there's been some indication in histories of the period that there were complaints from the European and Pacific theaters about the inexperience of officers and troops that were coming out of the replacement training centers. Did this all have to do with the rapidity of the mobilization and the type of training? The admissions requirements were changing; the amount of course work that was required was changing. But one of the areas that was mentioned was that people didn't have enough training in operations and maintenance of construction equipment. This fact is mentioned in one of the Army's World War II histories, *The Corps of Engineers: Troops and Equipment.* The volume states that the engineers came to a point where they realized that a lot of training was going to have to come through experience after they left because there just wasn't time to do this.

A: My answer is that it is probably true. My own experience doesn't exactly cover that. The training center at Leonard Wood had a very specific mission. It did not include specifically the training of officers other than those assigned there, and, by getting involved in the training activity, they would get on-the-job experience. It in no way served as an officer candidate school, which was held at Belvoir.

Second, there also was a very limited activity in training as far as equipment was concerned. We did train draftees, as a part of their course, to be operators of certain engineer equipment. We were not prepared to train mechanics. Leonard Wood's mission really didn't cover the things that you've indicated here; there simply wasn't time. My memory is that we had 9 to 11 weeks to train draftees before they went out to new units, and it was anticipated that the specialist training would come later. There certainly was no opportunity for anything other than performing the fundamentals of

an engineer soldier: bridging or pioneer work. A draftee learned to become a soldier first-to shoot and to live in the field-with minimal training to be an equipment operator on some of the relatively simpler types of engineer equipment. It was very, very basic training designed to take people off the street and to make them soldiers in a very short period of time.

Q: How successful was it?

A: Well, I have no real way ofjudging. In terms of the mission we were given, my feeling is that we turned out a product that was in keeping with that mission in the time given to do it. I was in the headquarters and not directly involved in the training, but I recall that most of the people who were engaged in the training felt that there wasn't sufficient time to do the things they really needed to do. There was always the question of how do you get the necessary skills and knowledge that have to be taught to make a soldier out of a raw recruit in such a short period of time. There was no time for any advanced individual training. The best we could really do was some semblance of training to platoon level. Nothing more than that.

I do think the experience would indicate that it is necessary to set up a more advanced course for training mechanics and skilled equipment operators and other specialists. In the time period available for basic training, there simply wasn't any time for advanced training. It could have been done there if people had been kept longer, but in the time frame given it was not possible.

Q: Were you involved in any postwar assessment of the mobilization effort?

A: Other than being assigned as an instructor at the Engineer School from 1947 to 1949, responsible for the engineer combat portion of the advanced course for officers where we used wartime experiences as background as we prepared lesson plans and taught them, I had no part in any formal evaluation of World War II.

Q: Can you think of any other experiences in the period before your departure for England that you would like to recall?

A: One of the things that impressed me as a young officer occurred at Fort McIntosh. After I'd been there about two years (this would have been in the fall of 1940), a new commanding officer came in, Lieutenant Colonel Wilhelm D. Styer, who later became chief of staff of the Army Service Forces under General [Brehon B.] Somervell. I remember Colonel Styer telling our group of young Regular officers, "I'm not really trying to train you to be lieutenants and captains; I'm trying to train you to be battalion commanders." As far as I know, every one of those 10 or 12 lieutenants and young captains became battalion commanders later in the war. He foresaw the need. And less

than two years from the time that he was talking to us, I was a battalion commander. I have thought many times about this statement of his. Here was a man who probably had spent 15 or 17 years as a lieutenant or captain; yet he had kept the mission of the Army in his mind. And, as he saw mobilization beginning to take place, he knew there was going to be very rapid promotion with increased responsibilities for the young officers with very little service. His job was to be sure that we understood in this small unit what it meant to be a battalion commander of 700 to 1,000 men.

This experience stayed with me. At Leonard Wood, in certain officers who were there, I also saw this same degree of looking ahead and seeing what the mission was. On the other hand, at Leonard Wood there were among those officers sent there as a cadre some who had retired on the job a number of years before. Even as a young lieutenant, it didn't take me very long to decide who were the officers who were going to be effective during the war and who were the ones with very little imagination or notion as to what it was all about. In the very small Regular Army, clearly, among the officers with whom I came in contact in the Corps of Engineers, there were some who had vision and knew what they were doing and others who had to be goaded and led around and hadn't had an original thought for years. I very quickly realized both were there. It became necessary (and while I had nothing to do with it), I saw, to replace these people because they weren't the ones who had the qualifications to be training new people.

At that time there was a forced retirement from the Army of some officers, even as we prepared for war. These officers were removed from the service because they simply didn't have what it took to be effective in a wartime situation. This was not limited to the Corps of Engineers. It was an Armywide thing for which the Corps furnished a few candidates. It was an early experience in knowing that there comes a time when you have to be willing to make a choice of who has the capability and who doesn't. I found it very intriguing that in the midst of preparation for war this action was taken to eliminate from the officer roll those who by experience, training, or initiative didn't appear to have what it took to go ahead. I would assume that this was an action by General [(George] Marshall as the chief of staff who recognized there had to be some elimination of dead wood. While there probably were some individual injustices, in general, I thought it showed remarkable foresight in terms of the importance of being sure that the people who were in charge of training were qualified, not only by experience, but also by attitude and initiative to do the work.

England, February-June 1944

Q: What was your feeling, then, as you sailed for Europe in 1944? You knew that you were going to England with the 105th Engineer Combat Battalion as the commander,

and you were going to be with the 30th Infantry Division. How much did you know about what you were preparing to do?

A: Very little, really, other than we would be a part of any invasion when it took place. Certainly, even as battalion commander, I didn't at that time have any idea when the invasion would be. I knew that we were part of the buildup in England, that we would complete our training in England, and that somewhere along the line we would be a part of the invasion force.

Looking back, I was assigned at a relatively early age as a battalion commander, in November 1942 with just over four years of experience. I had been promoted to major in June 1942, and I felt a tremendous responsibility in being given a battalion to train. I felt very strongly what Colonel Styer had told us about our responsibilities. I felt that I'd had as good a background as anybody could have. Having served in the 8th Engineer Squadron with very active training and much field work, I felt this served me in good stead. It was with a sense of great responsibility and anticipation, yet of necessity, that I joined the battalion. I felt that having a full-strength unit with a year to train it gave me an opportunity to do the job. Also, I had a good group of officers who worked with me to do it. In my mind, when we sailed for England, we were ready for combat.

When we got to England, we emphasized more than anything else in our training what we knew from the North African campaign- t h e importance of mine warfare. Of all the preparation we did in England between our arrival at the end of February and the time we went to the continent about the 10th of June, mine warfare training was most important. My feeling was that since we were about to go into combat, we had to do something besides train with dummy mines.

Q: You had experience with that?

A: Some.

Q: In Texas.

A: Yes, in the early days I had used my own ideas on how you could make mines since we didn't have any available for issue. So I devised a training program—

Q: Now when was this?

A: In England-to train people to handle mines. We started out with dummy, or inert, mines, and had a record kept of each trainee as he progressed through increasingly difficult mine training. As we found people who psychologically or emotionally simply

could not handle it, we removed them from the training program. After first handling-including planting and finding dummy mines-we started using live mines, although not activated, to plant and to find. We had a few German mines and used these also. We kept up this training so that at graduation each man who lasted through it and appeared to have the emotional stability to do it had to pass the final exam, which was to remove a buried live mine that was booby trapped with a pressure release device and a quarter pound of TNT. In other words, this was a lethal thing. It didn't make sense to me to have people training with dummy or inactivated mines when, in a few weeks, they were going to be in combat.

Of the men in the platoons and line companies, as I remember it, somewhere between 300 and 400 passed that final exam. There was one training accident in which one man was killed when he started to deactivate this device and, through some means, whether from carelessness or some other reason, it exploded. In my own view, this was extremely tragic. Nevertheless, for the group as a whole, in order to prevent more casualties during combat operations, it was essential that we train people to be capable of removing mines in combat. Just about the time we finished this training program, someone in the theater headquarters got the idea that training accidents were verboten and forbade the use of live mines in training. I think this was one of the most unwise training directives that I've ever heard of under the circumstances. It would have made sense back in the United States as people were starting their training, but here we had people (with D-Day just a matter of weeks away) who would be in France working in a very heavily mined area (from all the intelligence reports). I saw, as one of the primary missions of this battalion, the need to remove mines. I could not bring myself to take these people into enemy minefields without the psychological training of having dealt with live mines in their training.

This was the training program that I developed as a battalion commander. I don't know how many other people used it. I was astounded when the orders came out from headquarters that we could not use live mines in training. I think it was a very short-sighted view. I don't know who was responsible for it, but I was delighted that we had completed our training before this came about and with only one casualty. I am absolutely certain we saved many lives when we faced the real thing.

Q: Do you think the order was a reaction to your accident?

A: We weren't the only ones, but I suspect that ours had a part. But the training proved that we had people who had a respect for mines but were not afraid of what they had to do when they went into combat. Of all the training innovations for which I was personally responsible, I really believe that this was one of the most effective. As I say, we didn't keep people in it if we saw (of course, we weren't psychologists, but the officers were very careful to observe people) that they lacked the psychological

capability to face the task. We simply removed them and made a note of it, and we kept this information as we went into combat.

Of course we did bridge and other training that we could do with limited capability and space available in England. We got our equipment ready to go. Our unit was one of those that went in on what was called the "first turnaround" of shipping after the invasion. We were not involved in the actual D-Day, but we went in about D+5 or D+6.

Q: The battalion journal, I think, listed it as June 13th.

A: It could have been. I went in two days ahead of the battalion with an advance crew of the division.

Q: I wanted to ask you about the "capable" officers you had serving with you in the battalion. Were you referring to people like [Major Antonin M.]Sterba?

A: Sterba was a Reserve officer, as was [John A.] Allison, who was the B Company commander, then became the S-3.

Q: [Oakes] Hayden?

A: Hayden was the battalion S-2. I had only one Regular officer, a young lieutenant named [Edmund H.] Leavey, a West Point graduate of 1942. He did not stay with the battalion long. I believe he was reassigned before we actually went to England. But the battalion officers were either National Guard or Reserve officers. They had, for the most part, been with me during the training of the battalion in the States and had basically done a very, very good job.

Originally, Sterba had been the S-3, and Major [Joseph F.] Kulas had been the battalion exec. Kulas was moved out to command a battalion on his own, an exception to the plan that we wouldn't be raided, in order to give him a chance for promotion and also to best use people with experience. Sterba became the exec and Allison-and again I don't remember whether this was after we got to England or not-moved from B Company commander to S-3.

Q: I think the journal will show the time development of some of these events.

A: Yes. It was a unique opportunity to take a battalion from the start of training of a brand new set of recruits, through a year's individual, squad, platoon, company, battalion, and division maneuver exercises as a unit. I think this was an outstanding example of the right way to train a division and all of its components for a military operation. How